Pedestrian doorsets, windows, curtain walling, grilles and shutters - Burglar resistance - Test method for the determination of resistance under dynamic loading

EESTI STANDARDIKESKUS
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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 1629:2011+A1:2015 sisaldab Euroopa standardi EN 1629:2011+A1:2015 ingliskeelset teksti.	This Estonian standard EVS-EN 1629:2011+A1:2015 consists of the English text of the European standard EN 1629:2011+A1:2015.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 23.12.2015.	Date of Availability of the European standard is 23.12.2015.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 13.310, 91.060.50

EUROPEAN STANDARD

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EN 1629:2011+A1

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Supersedes EN 1629:2011

English Version

Pedestrian doorsets, windows, curtain walling, grilles and shutters - Burglar resistance - Test method for the determination of resistance under dynamic loading

Blocs-portes pour piétons, fenêtres, façades rideaux, grilles et fermetures - Résistance à l'effraction - Méthode d'essai pour la détermination de la résistance à la charge dynamique

Türen, Fenster, Vorhangfassaden, Gitterelemente und Abschlüsse - Einbruchhemmung - Prüfverfahren für die Ermittlung der Widerstandsfähigkeit unter dynamischer Belastung

This European Standard was approved by CEN on 2 December 2010 and includes Amendment approved by CEN on 17 November 2015.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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European foreword

This document (EN 1629:2011+A1:2015) has been prepared by Technical Committee CEN/TC 33 “Doors, windows, shutters, building hardware and curtain walling”, the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2016, and conflicting national standards shall be withdrawn at the latest by June 2016.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document includes Amendment 1 approved by CEN on 2015-11-17.

This document supersedes [A1] EN 1629:2011 [A1].

The start and finish of text introduced or altered by amendment is indicated in the text by tags [A1] [A1].

This European Standard is one of a series of standards for burglar resistant pedestrian doorsets, windows, curtain walling, grilles and shutters. The other standards in the series are:

— EN 1627:2011, *Pedestrian doorsets, windows, curtain walling, grilles and shutters – Burglar resistance – Requirements and classification*;

— [A1] EN 1628:2011+A1:2015 [A1], *Pedestrian doorsets, windows, curtain walling, grilles and shutters – Burglar resistance – Test method for the determination of resistance under static loading*;

— [A1] EN 1630:2011+A1:2015 [A1], *Pedestrian doorsets, windows, curtain walling, grilles and shutters – Burglar resistance – Test method for the determination of resistance to manual burglary attempts*.

This standard is a revision of, and supersedes [A1] EN 1629:2011 [A1]. The last two other standards in this series are revisions of, and supersede [A1] EN 1628:2011 [A1] and [A1] EN 1630:2011 [A1] respectively.

This revision incorporates grilles and curtain walling in the range of application.

The test described in this standard is intended to simulate physical attacks, e.g. shoulder charge, kicking.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard specifies a test method for the determination of resistance to dynamic loading in order to assess the burglar resistant properties of pedestrian doorsets, windows, curtain walling, grilles and shutters. It is applicable to the following means of opening: Turning, tilting, folding, turn-tilting, top or bottom hung, sliding (horizontally and vertically) and rolling as well as fixed constructions.

There are two aspects to the burglar resistance performance of construction products, their normal resistance to forced operation and their ability to remain fixed to the building. Due to the limitation of reproducing the fixing methods and building construction in a laboratory environment this aspect is not fully covered by the standard. This is particularly true with products built into a building. The performance of the fixed part of the product is evaluated using a standard sub frame. It is the manufacturer´s responsibility to ensure that guidance on the fixing of the product is contained in the mounting instructions and that this guidance is suitable for the burglar resistance class claimed for the product. As with the other referenced standards this specification uses a standard sub frame and the product is mounted according to the manufacturer´s instructions. The fixing method to be considered is detailed in Annex A of EN 1627:2011. This test method does not evaluate the performance of the fixing to the building.

This European Standard does not apply to doors, gates and barriers, intended for installation in areas in the reach of persons, and for which the main intended uses are giving safe access for goods and vehicles accompanied or driven by persons in industrial, commercial or residential premises, as covered by EN 13241-1.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 356:1999, *Glass in building — Security glazing — Testing and classification of resistance against manual attack*

EN 1303:2005, *Building hardware — Cylinders for locks — Requirements and test methods*

EN 1627:2011, *Pedestrian doorsets, windows, curtain walling, grilles and shutters — Burglar resistance — Requirements and classification*

〉A1〈 EN 1628:2011+A1:2015 〉A1〈, *Pedestrian doorsets, windows, curtain walling, grilles and shutters — Burglar resistance — Test method for the determination of resistance under static loading*

〉A1〈 EN 1630:2011+A1:2015 〉A1〈, *Pedestrian doorsets, windows, curtain walling, grilles and shutters — Burglar resistance — Test method for the determination of resistance to manual burglary attempts*

EN 1906:2010, *Building hardware — Lever handles and knob furniture — Requirements and test methods*

EN 12209:2003, *Building hardware — Locks and latches — Mechanically operated locks, latches and locking plates - Requirements and test methods*

EN 12600:2002, *Glass in building — Pendulum test — Impact test method and classification for flat glass*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 1627:2011 and the following apply.

3.1
attack side
side of the test specimen defined by the applicant as the side exposed to attack

3.2
non-attack side
side of the test specimen defined by the applicant as the side not exposed to attack

3.3
test specimen
complete, fully functioning construction product as detailed in the scope of this standard

3.4
sub-frame
surrounding frame into which the test specimen is mounted in accordance with the manufacturer's instructions

3.5
test rig
surrounding substantial steel frame with movable steel supports into which the sub-frames containing test specimens of various dimensions can be mounted

3.6
impacting unit
impactor suspended by means of a suitable steel cable, as a pendulum of fixed length, with a release hook and height regulating device

3.7
impactor
body used to strike the test specimen

3.8
impact point
position on the surface of the test specimen where the dynamic load is applied

4 Apparatus

4.1 Test rig

The test rig consisting of a rigid steel frame with movable steel supports into which test specimens of various dimensions can be mounted is shown in Annex A, Figure A.1. The stiffness of the rig shall be such that a 15 kN force applied to any of the defined points and normal to the plane of the frame will not cause a deflection of more than 5 mm and shall not affect the results of the test. The test rig shall not impede the execution of the test.